GOVERNMENT OF ANDHRA PRADESH ABSTRACT

M.A.& U.D.Dept., - Bheemunipatnam Municipality - Water Supply Scheme to Bheemunipatnam Municipality with Infiltration wells in river Gosthani at Majjivalasa as source, in place of proposed desalination plant - Orders - Issued.

MUNICIPAL ADMINISTRATION & URBAN DEVELOPMENT (A1) DEPARTMENT

G.O.Ms.No.400

Dated: 04 -06-2008 Read the following:

- 1. G.O.Ms.No.354, M.A.& U.D.(A1) Dept., dt.23-5-2007.
- From the EC (PH), Hyderabad Letter No. 21272/T1/Bheemli/De-salination/2008, Dt: 28.3.2008.

ORDER:

- In G.O. 1st read above, orders were issued according administrative sanction for Water Supply Scheme under UIDSSMT in Bheemunipatnam Municipality for an amount of Rs.1700.00 Lakhs.
- 2. Tenders were called for on 26-6-2007 and 23-6-2007. There being no response to the tenders, the Superintending Engineer (PH), Visakhapatnam, has submitted a report stating that the need of construction of desalination plant is to be re-examined in the light of substantial reduction in TDS (Total Dissolved Solids) values of water samples consequent to the construction of check dam cum surplus weir fully across the river. Frequent water analysis reports submitted by Superintendent Engineer (PH) revealed that the TDS values at the source on the upstream side of CC check dam are within the permissible limits (less than 500 mg/lit) and water supply is being supplied normally @ 3.21 MLD. The Total dissolved Solids values on the down stream side of the check dam are also reduced to values within the permissible limit of 500 mg/lit.
- During the Tender committee meeting held on 19.12.2007, the Engineer - in - Chief (PH) has appraised the members of the Tender Committee and Principal Secretary to Government, MA & UD Department for construction proposal of desalination plant Bheemunipatnam Municipality and explained that the proposal has been originally approved by the Government of India under the Programme of "Installation of Desalination Plants in coastal towns along Coromandel Coast" which was not materialized since the Planning Commission did not approve this programme. As per the Advise of the Deputy Adviser (PHE), CPHEEO, the proposal was posed under UIDSSMT. Subsequently, the Government of India has cleared this Scheme duly deleting the O & M cost for 3 years from the project cost which has to be borne by the ULB. The Engineer - in - Chief (PH) has further informed that in 2005, a check dam was constructed across the river Gosthani to store the surface flow for recharging the source on upstream side. The TDS values have come down to permissible limits prescribed for portable water consequent to construction of Check Dam.

- **4.** The Tender Committee has discussed the subject and decided to defer the tender for the time being and requested Engineer-in-Chief (PH) to constitute an Expert Committee to study the following and submit a report to Government for taking a final view / decision in the matter.
 - a. The need for establishing Desalination Plant and its sustainability with huge O & M Cost in the context of reduction of TDS values after construction of check dam.
 - b. Suggestion for more efficient, reliable, self sustaining and cost effective system.
- **5.** The Expert Committee constituted for the De-salination Plant have made the following observations in its report.
 - The check dam constructed across the river is assisting in maintaining the storage of water for stretch of 1 Km on the upstream side and is recharging the existing source and curtailing the possibility of intrusion of saline water on upstream side of check dam.
 - After studying the water analysis reports of water samples collected during different years, it is felt that the TDS values on upstream of the check dam have drastically gone down to the desired limits of less than 500 rpm (mg/lt) which is fit for human consumption.
 - Due to provision of desalination plant, some of the water spread in old bridge area and upstream of check dam will also be drawn by the proposed infiltration wells of desalination plant and mixed with the saline water in that area and reduces fresh water potential on the upstream.
 - If the Desalination plant is not installed, the proposed 6 Nos. of infiltration wells at the Desalination Plant site can be avoided and thereby the reach between the check dam and proposed Desalination Plant which is about 0.50 to 1.00 KM get saturated with fresh water and the salt water intrusions towards upstream can be avoided.
 - At this juncture, under present circumstances, <u>there is no necessity of Desalination Plant.</u>
 - After studying the Geo-Engineering reports of Andhra University and field inspection of the alternate source at Majjivalasa, about 5.00 to 6.00 KM upstream side of existing head works at Naragarapalem, the Committee felt that around 4.70 mld to 5.70 mld of water can be tapped additionally to cater the needs of the Municipality against the balance ultimate demand of 5.55 mld. There will not be any effect on the yield of the existing head works if sub-surface dam is constructed.

- Construction of Sub-Surface dam, 100 m down stream of the proposed infiltration wells at Majjivalasa to augment ground water during adverse seasonal conditions may be considered.
- As per the cost analysis, the Committee felt that the alternate source is economically viable in respect of not only on installation cost but also on O&M cost point of view.
- **6.** In view of the recommendations of the Expert Committee, reliability of source and lesser capital and O&M costs, the Engineer-in-Chief (PH), Hyderabad has recommended proposal with infiltration wells at Majjivalasa as the alternate source in place of desalination plant and he has requested to permit to take up Water Supply scheme to Bheemunipatnam Municipality with Infiltration wells in river Gosthani at Majjivalasa as source, the cost of which is within the administrative sanction amount of Rs. 1700.00 Lakhs, in place of proposed Desalination Plant.
- 7. Government after careful examination, hereby accord permission to take up water supply scheme to Bheemunipatnam Municipality with Infiltration wells in river Gosthani at Majjivalasa as source, subject to meeting the expenditure within the administrative sanction amount only.
- **8.** This order issues with the concurrence of Finance (Expr. M&F) Dept., vide their U.O.No.13113/174/A1/ Expr.M&F/2008, dated 21-5-2008.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

S.P. SINGH, PRINCIPAL SECRETARY TO GOVERNMENT

To

The Engineer-in-Chief (PH) Hyderabad.

The Commissioner & Director of Municipal Administration, Hyderabad.

Copy to:

The P.S. to Prl. Secy. to Govt., MA&UD Dept., Sf/Sc.

// FORWARDED :: BY ORDER//

SECTION OFFICER